

Spectroplast TrueSil A50

A white translucent silicone material for general applications

TrueSil Silicone products are high performance 3D printed (3DP) silicone rubber products produced by Spectroplast's proprietary Silicone Additive Manufacturing (SAM) technology. These silicone elastomers are made of 100% pure silicone and fulfill market standards in terms of performance and surface quality. TrueSil Silicone products come in various shore durometers. All 3D printed products made of TrueSil Silicone are postprocessed after 3D printing to obtain final performance. All tests and certifications are performed on printed products and not the raw material.



MATERIAL DATA

TrueSil A50

	METRIC ¹	IMPERIAL ¹	METHOD
Shore Hardness	50A ± 10		ISO 7619-1
Young's Modulus	> 0.9 MPa		ISO 37 Type 4
Tensile Strength	> 8.5 MPa	> 1232 psi	ISO 37 Type 4
Elongation	> 600 %		ISO 37 Type 4
Tear Strength	> 9 N/mm	> 51 lbs/in	ASTM D624 Type C
Compression Set ^{24h RT}	< 1.5 %		ASTM D395 Type B
Compression Set ^{24h 80°C}	< 9 %		ASTM D395 Type B
Color	white translucent		
Cytotoxicity ²	Non-Cytotoxic		ISO 10993-5:2009
Skin Irritation ²	Non-Irritant		ISO 10993-23:2021-10
Surface Roughness	Side = Sa 3.6 um, Top = Sa 1.2 um		ISO 25178-2:2012
Density (Solid)	1.101 g/cm ³		ISO 27813 ³
Rebound Resilience	59 % ± 2%		ISO 4662

¹Material properties can depend on part geometry, print orientation, temperature and disinfection or sterilisation methods.

²Printed parts were submitted to TentaConsult for evaluation in accordance with ISO10993-5:2009 Biological evaluation of medical devices-Part5: Tests for in vitro cytotoxicity; ISO 10993-23:2021-10 Biological evaluation of medical devices-Part23: Test for skin irritation.

³ Nonstandard samples were used.

DISCLAIMER

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